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DEVELOPMENT OF AGRICULTURE IN LOWER  
GEORGIA FROM 1890 TO 1920  
WITH A SUMMARY FOR THE WHOLE STATE,  
1850 TO 1920.

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In the March and June numbers of the Quarterly the writer described geographical conditions in all parts of Georgia, the methods of illustrating them by means of census statistics, and the development of agriculture in each region from 1850 to 1880. In the September number the story was brought down to 1920 for the upper part of the state (highland region), and the present article does the same for the lower part or coastal plain, completing the series. A condensed summary for the whole state and entire period is added. The methods of investigation and their limitations have been pretty fully discussed in the previous articles, so that little more needs to be said about them here.

Some recent literature on the coastal plain of Georgia, not cited in the previous articles, should be mentioned. In November, 1906, the writer published a monograph on the vegetation of the Altamaha Grit region (rolling wire-grass country), as vol. 17, part 1, of the Annals of the New York Academy of Sciences, with 414 pages, a map, and 28 plates. That described the geology, topography, soil, climate, vegetation, etc., of the region pretty fully, sketched conditions in the whole state briefly, and referred to the most important previous literature. Since that time several bulletins of the Geological Survey of Georgia, particularly No. 15, on the underground waters of the state (1908), and No. 26, on the geology of the coastal plain (1912), have added valuable information.

Three bulletins of the United States Department of Agriculture, nos. 492, 648, 1934, on farm management

studies in Sumter and Brooks Counties (1920-1922), contain a mass of detail about agricultural conditions, for whites and negroes and owners and tenants separately, surpassing anything ever attempted by the census. But unfortunately each of these counties lies in two quite distinct regions, which are not recognized at all in the bulletins, which therefore are not worth much for geographical purposes. If similar studies should ever be made, approximately simultaneously, of a typical red hill county and a typical wire-grass country, for example (or better still of every county), some very interesting comparisons would be possible.

The boundaries of the several regions discussed are shown again on the accompanying map, which represents conditions as they were exactly in the middle of the period covered by this series of articles. The counties were the same in 1890 as in 1880\*

In the tables following the hammock belt and coast strip are omitted from the four that are chiefly made up of statistics of the number of inhabitants, value of farm property, number of animals, etc., *per square mile*, because the counties used to typify them all contain large areas of relatively sparsely settled piney woods, which would make the ratios very inaccurate. But these regions are included in the tables for white and colored farmers in 1910 and crop yields in 1919, for uninhabited areas have no influence on such ratios.

In each table the highest number in each line is printed in heavy type and the lowest in italics (as was done in the first two articles and would have been done in the third if the printers had not misunderstood), unless two are so

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\* Those used to represent the several regions statistically are as follows:

*Sand-hills* :—Glascock, Taylor.

*Blue mart region* :—Chattahoochee, Quitman, Stewart.

*Red hills* :—Burke, Clay, Houston, Jefferson, Macon, Randolph, Schley, Twiggs, Washington, Webster, Wilkinson.

*Red lime lands* :—Calhoun, Dougherty, Lee, Terrell.

(*Sandy*) *lime-sink region* :—Baker, Dooly, Early, Miller, Mitchell, Pulaski.

*Rolling wire-grass country* :—Appling, Berrien, Bulloch, Coffee, Colquitt, Emanuel, Irwin, Montgomery, Tattnall, Telfair.

*Hammock belt* :—Brooks, Lowndes, Thomas.

*Flat pine lands* :—Charlton, Clinch, Echols, Effingham, Pierce, Ware, Wayne.

*Coast strip* :—Chatham, Glynn, McIntosh.

nearly equal that it is impossible to decide between them or they fall in one of the omitted columns. In the latter



Map showing geographical or agricultural divisions of Georgia. The small areas without names are two portions of the Cumberland Plateau in the northwest corner, with a strip of Appalachian Valley between them, an outlier of the Blue Ridge in Polk and Paulding Counties, two portions of the fall-line sand-hills near the center of the state, and the Tallahassee red hills and peninsular lime-sinks region on the southern border. The railroads and counties are as in 1885.

case the fact is sometimes mentioned in the accompanying text. Most ratios over 10 are not carried out to decimals, for reasons explained in the former article on lower Georgia (in the June number). That same article describes the

TABLE 1.  
AGRICULTURAL STATISTICS OF LOWER GEORGIA,  
1889-90.

	Sand hills	Blue marl	Red hills	Red lime lands	Sandy lime sink region	Rolling Wire-grass	Flat pine lands
Inhabitants per square mile.....	24	32	31	35	23	12	8.6
Percent increase since 1880.....	1.8	4.1	5.7	8.7	21	65	40
Percent white.....	58	29	34	24	43	68	65
Percent colored.....	42	71	66	76	57	32	35
Percent in cities of over 8,000.....	0	0	0	0	0	0	0
Percent in cities of 2,500-8,000.....	0	0	0	9.1	0	0	8.1
Percent in cities of 1,000-2,500.....	0	0	6.1	5.2	5.1	1.2	0
Percent of land improved.....	27	46	38	39	23	7.3	3.3
Improved acres per inhabitant.....	7.5	8.5	8.1	7.2	6.6	4.0	2.5
Value of farm land and bldgs., per sq. mi. (\$).....	2210	2965	2850	2385	1600	1040	435
Value of implements and machin- ery, per sq. mi. (\$).....	95	114	135	145	79	43	22
Value of live-stock, per sq. mi. (\$).....	500	576	608	705	495	342	193
No. of horses, per sq. mi.....	1.4	1.6	1.7	1.4	1.8	1.0	0.7
No. of mules, per sq. mi.....	2.6	4.1	3.6	4.5	2.2	0.8	0.3
No. of work oxen, per sq. mi.....	0.9	0.8	0.5	0.5	0.8	0.5	0.4
No. of milch cows, per sq. mi.....	3.6	3.9	3.2	3.6	5.4	4.7	3.5
No. of other cattle, per sq. mi.....	7.7	7.2	5.5	6.1	11.5	12.8	8.6
No. of sheep, per sq. mi.....	2.1	0.8	1.5	0.6	8.8	20.3	4.4
No. of hogs, per sq. mi.....	29	19	31	25	31	25	14
No. of chickens, per sq. mi.....	108	111	102	88	75	51	25
No. of other poultry, per sq. mi.....	5.5	6.8	7.7	5.4	12.5	8.6	3.8
Cost of fertilizers, per sq. mi. (\$).....	114	144	158	175	96	50	17
Value of farm products, sq. mi. (\$).....	1380	2400	2110	2230	1335	528	218
Cost of fertilizers, per impr. acre.....	.63	.53	.65	.71	.64	1.07	.81
Value of products, per impr. acre.....	7.63	8.77	8.62	8.86	8.79	11.20	10.23
Pct. of improved land in cotton.....	35	41	41	45	40	27	19
Pct. of improved land in corn.....	32	25	28	29	33	35	39
Pct. of improved land in oats.....	4.7	4.3	3.6	5.3	4.8	7.4	4.2
Pct. of impr. land in sweet potatoes.....	0.8	0.6	0.6	0.6	0.6	1.7	2.4
Bales of cotton per acre.....	.32	.35	.34	.34	.35	.35	.26
Bu. of corn per acre.....	9.1	9.9	9.1	9.0	9.7	11.2	10.6
Bu. of oats per acre.....	9.2	11.5	10.5	10.1	8.5	9.7	9.0
Bu. of sweet potatoes per acre.....	75	71	69	73	92	80	97

differences between the several regions, so that little more needs to be said about them, and the figures will speak for themselves.

#### CONDITIONS IN 1889-1890

Table 1 shows the prevailing conditions in the several regions at the time of the Eleventh Census, which was taken in the summer of 1890, but ascertained crop yields, expenditures for fertilizers, etc., for the year 1889. Every region increased in population between 1880 and 1890, the sand-hills least and the wire-grass most. The density of population and percentage of negroes were still approximately proportional to soil fertility, except that the coast strip, the most densely populated, is not necessarily the most fertile, for a large part of its population is supported by fisheries and commerce. The only cities with more than 8,000 inhabitants, besides the fall-line cities, which belong partly to the Piedmont, were two seaports, Savannah and Brunswick, and the only ones between 2,500 and 8,000 (in the counties used for statistical purposes) were Albany, Thomasville, Valdosta and Waycross. Two regions had no places with as many as 1,000 inhabitants.

There was very little railroad building in lower Georgia between 1880 and 1890, except toward the end of the decade, when three lines (now belonging to the Seaboard Air Line) extending from Savannah north, west and south beyond the limits of the state were built. A part of the west-bound line had existed for a few years previously as a narrow-gauge road from Americus to Lumpkin.

The percentage of improved land increased in every region, and with it the value of farm property per square mile, though the value per farm probably did not change much. The number of horses increased in every region except the red hills, but mules increased still more, now outnumbering horses in every region except the wire-grass and the two southeast of it.

Work oxen decreased in every region, but not very much in the two nearest the coast. Cows decreased also, and other cattle likewise except in the lime-sink, wire-grass and ham-

mock belts, and even there they did not keep pace with the population.

Sheep increased a little in the wire-grass country, but not as much as the population, and decreased in all the others, presumably on account of the dwindling free range and increasing number of dogs. Hogs decreased in the three uppermost regions (which had the smallest increase of population) and increased in the others, but more slowly than the population in most cases. Chickens apparently increased largely in every region, but that is because those hatched in the spring of the census year were not counted in 1880 (which I did not realize when the preceding article was written).

The expenditure for fertilizers per acre increased in every region, but not very much in the sand-hills, for some reason. The value of products per improved acre decreased a little in the sand-hills and more in the coast strip, but increased in all the others, in spite of a nation-wide decline in commodity prices. The figures for value of products in different regions are not strictly comparable, though, for in the wire-grass and similar regions a considerable part of the total consisted of beef, pork, wool, etc., raised on free range, which had nothing to do with improved land. Products per farm would be more significant, if we only had separate figures for whites and negroes, which however were not given by the 11th Census or any preceding one.

The relative importance of cotton increased a little in every region except the coast strip, and corn, the other great staple, fell off correspondingly. The yield of both cotton and corn increased in most regions. Oats and sweet potatoes did not change much relatively, either in acreage or in yield.

#### CONDITIONS IN 1899-1900

Between 1890 and 1900 the population increased rapidly nearly all over South Georgia, in spite of the "hard times" in the early part of the decade, and the fact that the lowest commodity prices in the whole history of the United States, in the latter part of the period, caused rather pessimistic

feelings, especially among farmers. Some of the wire-grass counties more than doubled in population, and that region as a whole gained nearly 75%, a rate almost unprecedented for any equal area in the eastern United States within the memory of the present generation. Many logging railroads developed into regular railroads, and some entirely new systems were started. In the blue marl region

TABLE 2.  
AGRICULTURAL STATISTICS OF LOWER GEORGIA,  
1899-1900.

	Sand hills	Blue marl	Red hills	Red lime lands	Sandy lime sink region	Rolling wire-grass	Flat pine lands
Inhabitants per square mile.....	28	33	33	41	30	20	11
Percent increase since 1890.....	16	5.1	7.6	18	33	74	33
Percent white .....	55	27	32	22	43	64	66
Percent colored .....	45	73	68	78	57	36	34
Percent in cities of over 2,500.....	0	0	1.5	14.5	0	0	10.7
Percent of land improved.....	30	41	40	46	32	13	4.9
Improved acres per inhabitant.....	7.1	7.6	7.9	7.2	6.7	4.0	2.8
Percent of farmers, white.....	70	37	41	26	54	81	87
Percent of white farmers, owners..	49.9	46.0	48.5	48.8	55.0	68.4	80.0
Percent of white cash tenants.....	24.1	35.5	30.5	22.6	21.2	10.4	6.2
Percent of white share tenants.....	21.0	13.7	15.4	20.9	19.5	17.7	11.1
Percent of colored farmers owners	8.2	5.3	4.9	5.0	10.1	37.0	59.6
Percent of colored cash tenants....	49.6	49.7	49.6	48.0	47.4	21.5	18.5
Percent of colored share tenants....	41.2	43.0	43.9	45.9	41.4	38.6	15.6
Value of farm land per acre (\$)....	3.70	4.33	5.17	5.20	4.78	3.24	1.58
Value of farm property, per sq. mi.	3020	4040	3900	4010	3255	2460	970
No. of horses, per sq. mi.....	1.3	1.6	1.7	1.6	2.1	1.4	0.8
No. of mules, per sq. mi.....	3.5	4.7	4.3	5.5	3.3	1.7	0.5
No. of cattle, per sq. mi.....	10.8	10.8	7.1	7.9	15.4	21.0	16.4
No. of sheep, per sq. mi.....	1.1	0.4	0.3	0.1	7.8	17.1	5.0
No. of goats, per sq. mi.....	2.0	0.6	0.7	0.5	2.6	2.5	2.0
No. of hogs, per sq. mi.....	27	24	29	30	33	30	16
No. of chickens and guineas, sq. m.	58	73	81	93	78	51	24
No. of turkeys, per sq. mi.....	0.7	2.2	2.3	3.2	2.4	1.5	0.8
No. of geese, per sq. mi.....	1.4	0.4	2.3	1.0	4.5	7.9	3.4
No. of ducks, per sq. mi.....	0.2	0.1	0.4	0.3	0.5	0.5	0.2
Colonies of bees, per sq. mi.....	3.0	2.9	2.1	1.6	1.2	1.9	1.7
Cost of labor, per improved acre..	.50	1.15	.84	1.06	.72	.66	.56
Cost of fertilizers, per impr. acre..	.50	.37	.54	.52	.44	.77	.53
Value of products not fed to live-stock, per improved acre.....	7.00	7.54	7.83	7.68	7.10	11.28	10.80



however, which had the smallest population increase, the railroad mileage was diminished by about two miles by the straightening of what is now the Seaboard Air Line in Stewart County in 1896, and none has been added since.<sup>1</sup>

The negroes increased faster than the whites in most regions, presumably on account of the supplanting of lumbering, turpentine and stock-raising by cotton-growing, which requires a large amount of unskilled labor. The proportion of urban population increased, as it has been doing throughout the civilized world for many decades past.

The improved land increased nearly as fast as the population. White and negro farmers were counted separately for the first time in 1900, and every region had a larger proportion of whites among the farmers than in the total population, as was noted in the preceding article, covering upper Georgia for the same period. The percentage of farm owners among the whites was greatest in the wire-grass and flatwoods, where land was cheap, but among the negroes there were as many owners in the coast strip as in the flatwoods, for reasons not altogether obvious.

The value of farm land per acre, obtainable for the first time in 1900, was lowest in the most thinly populated region, the flat pine lands, and highest in the coast strip, as might have been expected; and the same is probably true of the value of farm property per square mile, though accurate figures for the coast strip are not possible under the circumstances. But if improved and unimproved land were valued separately there might not be much difference between the several regions, for in a thinly settled country the average farm consists mostly of unimproved land, which is worth very little.

Horses increased a little in most regions, but not as much as the population or number of farms. Mules now outnumbered them everywhere except in the flatwoods and

<sup>1</sup> It may be worth recording as a hitherto unpublished incident of Georgia history that the railroad continued to charge for the transportation of passengers over the missing two miles until the summer of 1904, when the writer brought the matter to the attention of the Georgia Railroad Commission and had it stopped.

perhaps in the coast strip. Cattle continued to decrease with the passing of the free range, except in the wire-grass and flatwoods, and even there they did not keep pace with the great increase of population. Hogs increased and chickens decreased a little in most regions, if the figures are correct. Turkeys were most numerous in the more fertile regions, and geese in those that had the most free range; but whether the same was true in other states I have not investigated. Ducks were much less numerous than turkeys and geese, except in the coast strip, where they about equaled turkeys and exceeded geese.

The expenditure for fertilizers per acre decreased between 1889 and 1899 in every region except the coast strip, but this may indicate a mere reduction in price rather than quantity, for in 1889 the phosphate fields of Florida had just been opened up, and that product may have been more expensive then than it was later. The value of products per acre declined a little in the five uppermost regions and rose in the four lowermost, though that is not easily explained.

#### CONDITIONS IN 1909-1910

Soon after the beginning of the present century so many thriving towns had grown up at railroad junctions remote from county-seats in South Georgia that they began to demand courthouses of their own, and after more than a quarter of a century of inactivity in that line the legislature of 1904 provided for eight new counties (one in North Georgia and seven in South Georgia), which began to function in 1905. In 1906 another one was added to accommodate the "boom" city of Fitzgerald, founded as a G. A. R. colony about a dozen years before.

This legislation left the sand-hill and blue marl counties untouched, but cut off part of Burke in the formation of Jenkins, which made the red hill group a little more homogeneous. Jenkins was added to the list of lime-sink counties (though the eastern part of that region is not as typical as the southwestern, and the southern part of Dooly, including all the rolling wire-grass portion, made the new

county of Crisp, which however has not been used in any of the computations because it is about equally divided between lime-sink and wire-grass.

Ben Hill, Jeff Davis, Tift, Toombs and Turner Counties are wholly or mostly in the wire-grass, and increase the number of rows of figures to be copied and added to get

TABLE 3.  
GENERAL AGRICULTURAL STATISTICS OF LOWER GEORGIA  
1909-10.

	Sand hills	Blue marl	Red hills	Red lime lands	Sandy lime sink region	Rolling wire-grass	Flat pine lands
Inhabitants per square mile.....	30	31	34	48	38	30	15
Percent increase since 1900.....	8.0	—10	2.6	16	27	50	33
Percent white .....	56	24	31	21	41	66	67
Percent colored .....	44	76	69	79	59	34	33
Percent in cities of over 2,500.....	0	0	4.9	19.8	3.1	6.3	19.5
Percent of land improved.....	34	42	44	51	40	22	6.2
Improved acres per inhabitant.....	7.3	8.8	8.1	6.8	6.7	4.7	2.6
Value of farm land per acre (\$)...	7.20	8.28	12.05	16.10	14.70	13.60	4.96
Value of farm property, per sq. m.	6,700	7,160	8,880	11,500	10,150	9,580	2,510
No. of horses, per square mi.....	1.6	1.1	1.7	1.4	2.3	1.5	0.8
No. of mules, per sq. mi.....	4.6	5.0	5.6	7.2	5.3	3.8	1.0
No. of dairy cows, per sq. mi.....	4.9	5.0	4.3	4.5	6.8	7.0	4.8
No. of other cattle, per sq. mi.....	6.9	6.6	4.1	4.0	12.4	19.8	16.3
No. of sheep, per sq. mi.....	0.3	0.3	0.1	0	5.0	9.5	3.6
No. of goats per sq. mi.....	1.3	0.3	0.3	0.3	1.4	4.0	4.1
No. of hogs, per sq. mi.....	33	21	23	30	54	54	28
No. of poultry, per sq. mi.....	74	67	82	81	93	84	34
Colonies of bees, per sq. mi.....	2.0	1.1	1.4	1.2	1.2	2.0	1.7
Av. value of horses, per head (\$)..	115	131	126	133	130	128	118
Av. value of mules, per head.....	140	157	151	158	157	167	153
Av. value of cattle, per head.....	11.1	13.9	16.1	17.8	10.8	9.74	9.55
Av. value of sheep, per head.....	1.10	2.90	1.92	4.70	1.66	1.55	1.68
Av. value of goats, per head.....	1.00	1.26	1.55	1.40	.84	.58	.59
Av. value of hogs, per head.....	3.00	3.92	3.28	3.60	2.74	2.32	2.11
Av. value of poultry, per head.....	.32	.42	.38	.39	.35	.39	.45
Cost of labor (including board) per improved acre (\$)... ..	.95	1.20	1.22	1.60	1.20	1.08	1.28
Cost of fertilizers, per impr. acre....	1.50	1.10	1.38	1.88	1.60	1.96	1.51
Cost of stock feed, per impr. acre..	.12	.18	.18	.16	.20	.13	.22
Value of crops, per improved acre	16.50	14.47	16.80	18.90	18.95	23.40	10.00
Val. of animal products, impr. acre	2.26	1.23	1.32	0.95	1.53	3.14	4.26

statistics for that region from 10 to 15. Grady, formed from Thomas and Decatur, is added to the Hammock belt counties, but it is not very typical of that region, for it reaches all the way across the wire-grass to the lime-sink region. The formation of Grady made Decatur more homogeneous, and that could very well have been added to the list of lime-sink counties in 1910, but that has not been done.

Table 3 gives much the same sort of information for seven regions in lower Georgia that Table 2 did for the same regions a decade earlier, except that a section for the value of different kinds of farm animals is added.

The population continued to increase in most regions, but at a slower rate than between 1890 and 1900, and one region, the blue marl, lost over 10% if the figures are reliable. The cities grew faster than the country, as usual. The racial composition of the population did not change much. Improved land increased faster than population in nearly every region, making more improved acres per inhabitant, which is contrary to the usual tendency, but probably explained in large part by the decline of lumbering and turpentine, and the encroachment of cultivated fields on the cattle ranges.

The apparent value of farm land per acre more than doubled, but at least half of that change was due to a world-wide decline in the purchasing power of money, as noted in the preceding article. The value of farm property per square mile of course increased also, with the increase of population.

The number of horses increased in some regions and decreased in others, but mules increased everywhere, by this time outnumbering horses except in the coast strip. Cattle increased approximately 10% in every region, while sheep decreased about half in the area as a whole. Sheep are most numerous where the farmers are mostly white, for negroes seem to have little to do with them, in any part of the world. (See Table 5 on page 223 of the preceding article.) The number of hogs remained about the same in

the four uppermost regions and nearly doubled in the five lowermost. Goats, poultry and bees increased in some and decreased in others.

The variations in value of cattle, sheep, goats and hogs in different regions are interesting. Generally speaking, the most valuable animals are in the more fertile regions, where they are kept in pastures, and the least in the poor regions, where there is a great deal of free range, on which such animals can be raised at nominal expense and sold very cheaply. (There seems to be nothing in the census statistics to show that the net profits on scrub cattle and razor-back hogs are any less than on blooded stock.)

The expenditures for labor per acre increased in about the same ratio as prices in general, but those for fertilizers about trebled, presumably indicating a greater use of fertilizers. The (apparent) values of products per acre about doubled, in consequence of the increased expenditures.

Tables 4 and 5 give separate figures for white and colored farmers in all the nine divisions of lower Georgia, for 1910. The colored farmers were all negroes except two in Chatham County, who were probably Chinese, as there were two Chinese farmers somewhere in Georgia at that time. By this time the red lime lands and the coast strip proved an exception to the previously prevailing tendency for whites to be proportionately more numerous among the farmers than in the total population. That is doubtless correlated with the concentration of whites in cities in those regions, leaving negroes decidedly in the majority in the rural districts.

The number of foreign white farmers is insignificant, except in Ben Hill County and the coast strip. The largest proportion of owners among the whites is in the flatwoods, where land is cheapest, and the red lime lands represent the opposite extreme. The same two regions are also opposite extremes in percentage of improved land, white and negro farmers, and number of improved acres per farm (of white farmers). The poorest white farmers, however, are in the sand-hills, and the richest in the coast strip.

TABLE 4.  
STATISTICS OF WHITE FARMERS IN LOWER GEORGIA, 1909-10.

	Sand hills	Blue marl	Red hills	Red lime lands	Sandy lime-dunk	Rolling wire-grass	Hammock belt	Flat pine lands	Coast strip
Percent of total.....	63.0	28.2	34.6	18.0	44.1	73.2	52.0	84.1	37.0
Percent foreign-born .....	0	0	0.1	0.2	0.1	0.2	0.2	0.2	6.0
Pct. owners & part owners.....	49.3	52.3	48.1	46.8	48.5	55.4	56.9	75.6	68.0
Percent managers .....	1.0	4.1	2.3	7.1	0.7	0.4	1.3	0.4	3.8
Percent tenants .....	49.7	43.6	49.6	46.1	50.8	44.2	41.8	24.0	28.2
Av. no. acres per farm.....	150.0	252.0	169.9	216.0	124.8	163.0	148.0	258.0	385.0
Improved acres per farm.....	53.5	95.0	82.3	97.0	56.1	42.4	50.5	84.0	48.0
Value of:									
Farm land per acre (\$)..	6.85	7.95	11.73	14.90	14.62	13.10	12.50	4.84	12.00
Farm land per farm.....	1020	2000	1990	3220	1820	2140	1865	1248	4600
Buildings per farm.....	395	654	678	890	485	500	560	414	1650
Implements and mchy...	90	173	149	230	108	94	120	88	270
Number of:									
Dairy cows per farm.....	1.3	1.9	1.3	1.3	2.0	2.4	2.7	4.5	7.3
Work horses per farm....	0.4	0.6	0.6	0.7	0.6	0.5	0.8	0.7	1.5
Work mules per farm....	1.1	1.5	1.6	2.1	1.1	1.1	1.1	0.9	1.1
Acres of cotton per farm.....	16.5	25.0	24.6	32.8	19.7	14.6	10.7	6.3	0.4
Acres of corn per farm.....	18.3	23.4	23.0	23.0	18.0	14.4	16.8	14.0	9.7
Bales of cotton per acre....	.41	.39	.43	.48	.46	.49	.42	.40	.62
Bushels of corn per acre.....	10.4	10.3	10.8	12.8	12.4	14.2	13.9	14.3	23.0

Negro farm owners are relatively most numerous in the coast strip (as before), and least in the red lime lands. Those in the blue marl region have the most land under cultivation, and those in the coast strip the least. The poorest negro farmers, like the whites, are in the sand-hills, but the richest, at least as far as land is concerned, seem to be in the wire-grass, though those in the coast strip lead in buildings and machinery.

The coast strip has the most horses and dairy cows for both races, probably on account of the presence of the city of Savannah. The average white farmer has about one plow animal and a half, while the negro has just a little more than one to cultivate his proverbial forty acres. Some of the negroes in the flatwoods and coast strip evidently had neither horse nor mule.

**TABLE 5**  
**STATISTICS OF COLORED FARMERS IN LOWER GEORGIA,**  
**1909-10.**

	Sand hills	Blue marl	Red hills	Red lime lands	Sandy lime-sink	Rolling wire-grass	Hammock belt	Flat pine lands	Coast strip
Percent of total.....	37.0	71.8	65.4	<b>82.0</b>	55.9	26.8	48.0	15.9	63.
Pct. owners & part owners	10.2	7.1	6.8	5.3	9.7	23.2	27.0	58.1	73.
Percent tenants .....	89.4	92.7	93.1	<b>94.6</b>	90.3	76.7	72.9	41.9	25.
Av. no. acres per farm.....	64.3	87.8	63.1	52.4	57.3	64.8	54.4	94.2	62.
Improved acres per farm..	40.1	<b>55.5</b>	48.5	48.1	44.8	35.6	35.5	19.8	13.
Value of:									
Farm land per acre (\$ )....	8.65	8.70	12.50	<b>17.10</b>	14.70	17.10	13.95	6.78	12.3
Farm land per farm.....	550	765	786	895	861	<b>1109</b>	760	640	77
Buildings per farm.....	125	156	187	184	181	203	170	160	24
Implements and mchy..	23	38	41	39	43	42	31	31	6
Number of:									
Dairy cows per farm.....	0.6	1.0	0.7	0.6	0.8	0.9	0.9	1.2	1.
Work horses per farm..	.15	.12	.22	.15	.28	.26	.41	.42	.5
Work mules per farm....	0.9	1.1	1.0	1.1	1.0	0.9	0.7	0.5	0.
Acres of cotton per farm	18.2	25.8	24.0	<b>26.1</b>	23.0	16.0	12.4	4.7	0.
Acres of corn per farm.....	13.5	<b>15.8</b>	14.6	13.8	13.8	11.6	12.6	8.5	4.
Bales of cotton per acre..	.38	.33	.37	.43	.40	.46	.36	.41	.6
Bushels of corn per acre.	9.3	8.7	9.0	10.6	10.3	13.1	11.7	12.8	20.

The negroes specialize on cotton more than the whites do, as seems to be the case throughout the South, but the whites nearly everywhere make a little more to the acre. In corn the whites have the advantage in both acreage and yield, but the difference in yield is not great.

By subtracting the figures for negroes from those for all colored farmers we can ascertain that the two Chinese (?) farmers in Chatham County in 1910 averaged 20.5 acres of land, all improved, worth \$2,700 or \$131.70 per acre, buildings worth \$300, and implements and machinery \$500.

#### CONDITIONS IN 1919-1920

Between 1910 and 1920 several things happened in lower Georgia, some of them rather local and some part of nation wide or world-wide movements. The demand for new counties continued unabated. The eastern part of Pulaski

County was cut off in 1913 to form Bleckley, which made no change in the total area of the lime-sink counties. Seven counties were added to the wire-grass list, namely, Wheeler in 1913, Bacon, Candler and Evans in 1914, and Atkinson, Cook and Treutlen in 1919. Some of these took in parts of counties previously used to typify the flatwoods, and thus made both groups a little more homogeneous.

More significant was the arrival of the boll-weevil, which swept across Georgia from west to east during the decade, cut down the yield of cotton and thus raised its price, put many negro cotton-pickers out of employment, and caused other crops to be partly substituted for cotton, particularly peanuts, which seem to require about the same amount of labor per acre.<sup>1</sup>

Then the World War in the latter half of the decade first checked the demand for cotton temporarily, and then caused a great migration of southern negroes to northern factories and mines to take the place of foreigners who were hindered from immigrating; and the present immigration restrictions seem to be having a similar effect on the colored population in lesser degree. At the same time there was a shortage of imported fertilizers, particularly potash, which was produced mostly in Germany. A little later many able-bodied young men of both races were taken away from the farms, and finally the currency was inflated by bond issues until commodity prices in 1920 were just about double those of 1910.

The shortage of labor was partly met, throughout the country, by an increased use of machinery, and the shortage of fertilizer by cultivating more acres per man and giving more attention to live-stock and to crops which take little mineral food from the soil, such as syrup. The war strained the resources of the country, and although it did not cause the destitution here that it did in Europe, it must have made

1. A recent estimate places the cost of keeping the weevil in check, by means of labor and poison combined, at a little less than \$2 per acre. This suggests the desirability of adding to future census schedules an item for expenditures for insecticides, the cost of which must exceed that of fertilizers and feed in many sections.



the average person poorer, even though the inflated prices and the large incomes of a few profiteers tend to obscure the fact.

In the state as a whole the apparent value of implements and machinery per farm increased from \$72 in 1910 to \$204 in 1920 (\$97 to \$279 for whites, \$37 to \$99 for negroes), and after allowing for the difference in value of

TABLE 6  
GENERAL AGRICULTURAL STATISTICS OF LOWER GEORGIA  
1919-20.

	Sand hills	Blue marl	Red hills	Red lime lands	Red lime sink	Rolling wire-grass	Flat pine lands
Inhabitants per sq. mi.....	30	27	35	48	41	36	17
Percent increase since 1900....	1.0	—12	1.3	—0.4	7.5	20	15
Percent white .....	58	37	35	28	44	67	66
Percent colored .....	42	63	65	72	56	33	34
Per cent in cities of over 2,500	0	0	5.4	25	4.8	8.9	22
Percent of land improved.....	36	35	42	50	46	32	8.5
Impr. acres per inhabitant.....	7.6	8.2	7.8	6.7	7.2	5.6	2.9
Percent of farmers white.....	63	31	36	20	43	71	84
Pct. of white farmers owners	51.4	51.5	45.5	42.1	44.1	50.0	72.6
Pct. of white farmers tenants	47.8	44.9	52.0	53.0	54.7	49.4	26.8
Pct. of col. farmers owners...	7.6	11.4	8.7	6.0	8.0	15.9	44.0
Pct. of col. farmers tenants...	91.8	88.4	91.0	93.9	91.8	84.0	55.9
Val. of farm land, per acre (\$)	20.00	14.60	28.60	40.20	37.20	33.30	12.51
Val. of farm prop., per sq. mi.	15,900	11,000	19,850	26,200	24,500	22,600	5360
No. of horses, per sq. mi.....	0.8	0.9	1.4	1.2	1.8	1.3	0.7
No. of mules, per sq. mi. ....	5.6	4.4	6.9	8.0	7.9	6.4	1.0
No. of beef cattle, per sq. mi...	4.7	5.0	2.9	2.9	9.2	19.4	19.9
No. of dairy cattle, per sq. mi.	9.8	9.6	8.3	8.4	11.7	11.2	1.4
No. of sheep, per sq. mi.....	0.2	0.1	0.2	0.1	1.3	3.2	1.4
No. of goats, per sq. mi.....	1.1	0.2	0.7	0.9	2.1	5.6	3.7
No. of hogs, pr sq. mi.....	35	42	34	38	60	60	21
No. of chickens, per sq. mi.....	99	60	96	85	120	121	44
No. of other poultry, per sq. m	2.8	4.2	6.3	9.0	10.6	12.4	3.4
Colonies of bees, per sq. mi....	2.3	0.7	1.2	0.5	1.1	2.2	1.4
Cost of labor (includ'g board) per improved acre.....	1.15	1.8	2.03	1.95	1.29	1.02	1.9
Cost of fertilizers, impr. acre	3.88	2.13	4.25	2.65	3.34	3.63	2.7
Cost of stock feed, impr. acre	.28	.25	.35	.27	.25	.32	.6
Val. of crops, per impr. acre..	36.25	18.75	34.00	28.90	31.40	32.70	28.6

the dollar at the two periods it would seem that the amount of machinery must have increased nearly 50%. Some of the resulting changes in intensity of farming will be brought out farther on.

Another change, which had little to do with the war, was the enormous development of automobiles during the decade. Although most of those seem to be owned by city people and used mainly for pleasure, their owners had to have good roads to travel on, and even if all other factors had remained unchanged, the improvement of roads through the farming districts would tend to enhance the value of farm land and make farming more intensive.

As in other parts of the United States, few railroads were built during the war period, and several short lines were abandoned, largely on account of the competition of good roads, automobiles and trucks; which was rather inconvenient for those who did not own cars.

Table 6 shows much the same sort of data for seven regions as Table 2 did for the same twenty years earlier. The growth of population was checked a little by the war, as in most other parts of the world. There was a great decrease in the blue marl region again and a trifling one in the red lime lands, but in both the white population increased and the decrease can be ascribed to the northward migration of negroes. The percentage of whites increased in every region except the flatwoods, and in that region the city of Waycross accounted for nearly all the increase of population in the whole area. The war seems to have made most cities grow even faster than usual, while the rural population was practically at a standstill in many parts of the country.

The percentage of improved land increased in some regions and decreased in others, as did the number of improved acres per inhabitant. After allowing for the rise of prices there was still an increase in real farm land values, due to the increase of population, the improvement of roads, the increased proportion of improved as compared with unimproved land on farms, and perhaps other factors.

The number of horses declined in nearly every region, mostly on account of the increase of automobiles, but mules increased in most regions. Cattle also increased about 10%. Sheep continued to decline, but goats increased in some regions, and hogs and chickens in most. It will be observed that beef cattle are much more numerous than dairy cattle in the piney woods regions, where there is plenty of free range.

Expenditures for labor per farm and per acre did not change much, so that there must have been only about half as much labor employed in 1919 as in 1909. Expenditures for fertilizers and feed approximately doubled, like prices. The value of crops per acre was less than double in most regions, indicating lower yields, especially in the blue marl region.

At the present time the blue marl region is probably the best example in Georgia of extensive farming, i. e., cultivating a large number of acres per farm with a comparatively small yield per acre. This type of farming is also characteristic of the corresponding part of Alabama, and of the black belt, which adjoins it on the west, and still more so of the states between the Mississippi and Missouri Rivers, where corn and wheat are raised on very large farms with the aid of elaborate machinery. The population of all such regions (outside of cities) seems to be nearly at a standstill at present, and the blue marl region has been losing about one percent of its population annually for the last twenty years.

The coast strip is the nearest approach in Georgia to the other extreme, intensive farming, with small farms and high yields per acre, resulting from large expenditures for labor, fertilizer, etc., accompanied in most cases by rather high land values. This is partly on account of the city of Savannah furnishing a ready local market for vegetables, the good railroad connections with northern markets, the mild winter climate favoring early vegetables, and the level topography which allows water and fertilizer to be evenly distributed. (The original soil fertility hardly enters into the problem

at all.) Negroes happen to be in the majority in both the blue marl and the coast strip, but as a rule in most parts of the country they tend to engage in general farming, rather than in extensive farming with machinery, or intensive farming which to achieve the greatest success requires very efficient marketing.

Table 7 gives the relative acreage and yield of eight leading crops in lower Georgia in 1919. These seem to be those occupying the largest acreage in the area as a whole, but in some regions other crops may be more important than some of these eight. And it should be borne in mind that acreage and yield fluctuate from year to year, and the census year may have been abnormal in one way or another, so that the figures should not be taken too literally.

The relative acreage of cotton had declined since 1909 in some of the regions, especially the blue marl, and its

TABLE 7  
ACREAGE AND PRODUCTION OF LEADING CROPS IN LOWER GEORGIA, 1919.

	Sand hills	Blue marl	Red hills	Red lime lands	Sandy lime-sink	Rolling wire-grass	Hammock belt	Flat pine lands	Coast strip
Pct. of improved land in:									
Cotton .....	36.0	21.4	31.7	32.8	32.5	31.6	14.9	10.4	6.1
Corn .....	35.6	28.3	32.8	29.7	36.4	39.5	38.0	43.1	30.7
Oats .....	1.17	1.16	0.98	2.15	1.37	2.43	3.46	2.29	0.65
Cowpeas .....	5.8	4.2	3.0	0.4	0.4	0.2	0.1	0.4	0.6
Peanuts .....	0.2	3.9	1.5	6.6	6.7	1.5	4.4	0.7	0.2
Sweet Potatoes .....	0.6	0.5	0.5	0.5	0.7	1.2	1.7	3.1	4.5
Sorghum (for syrup).....	0.3	0.2	0.12	.04	.05	.07	.04	.11	0
Sugar-cane .....	0.2	0.1	0.2	0.2	0.4	0.6	1.7	1.2	1.0
Yield per acre.									
Cotton (bales) .....	.30	.17	.31	.24	.24	.24	.24	.22	.27
Corn (bushels) .....	10.9	9.2	10.0	10.5	11.1	11.7	12.6	11.6	15.2
Oats (bushels) .....	13.7	17.4	13.9	14.0	14.7	15.5	15.4	12.3	18.9
Cowpeas (bushels) .....	2.8	3.8	3.0	5.8	3.5	5.6	9.2	5.5	10.0
Peanuts (bushels) .....	19.9	20.0	20.0	13.6	18.6	20.0	22.1	21.6	20.9
Sweet Potatoes (bu.).....	109	80	94	76	94	88	89	100	118
Sorghum (gals. syrup)...	35	49	51	58	52	57	74	49	.....
Sugar-cane (gals.) .....	101	129	114	136	168	158	269	214	146



time, and partly because of census gives no information about the acreage of some of these crops, or the value of others.

#### SUMMARY

The salient features of each region and the prevailing conditions in each decade having been sketched in these four articles, it will now be appropriate to sum up the 26 tables with their over 3800 ratios, and review in a more general way the principal changes in agricultural conditions in the whole state in the 70-year period covered. Some of the changes have been shared by the whole civilized world, while others have been more or less peculiar to the south-eastern United States or to certain regions<sup>1</sup>.

First there will be presented a graph showing the changes in the percentage of improved land in each region for which the statistics can be depended on. In ante-bellum days (after the pioneer period of cutting away the virgin forests), and probably up to about 1880, the percentage of improved land was a very good indicator of soil fertility, though the Civil War caused a decline in most regions, which is easily understood, and the utilization of land in the mountainous portions of the state was hindered some by the topography. Some of the ups and downs of the curves may be due to faulty census figures, but it is pretty evident that the Lower Piedmont, blue marl, red hills, and red lime lands are the most fertile regions in the state on the whole. Just before the Civil War most of the farming in Georgia was confined to them.

About 1880 the influence of commercial fertilizers began to be felt, and the improved land curves took an upward turn in regions formerly regarded as almost unfit for farming, especially the wire-grass, and to a lesser extent the somewhat more fertile lime-sink region adjoining. The improved land in the wire-grass more than doubled between 1900 and 1920, and millions of acres of beautiful park-

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1. At this point the reader would do well to refer again to Dr. R. P. Brook's "Agrarian Revolution in Georgia," cited in the first article in this series, for it discusses some of the developments between 1865 and 1912 in more detail than there is room for here.

like long-leaf pine forests which stood in that and the lime-sink region when the writer first explored them in 1900 have been destroyed by the greedy farmers and replaced by a dreary wilderness of stumpy fields, so that that part of the state is now a much less desirable place of residence for any one who cares anything for the beauties of nature. (What the farmers have gained, if anything, will be discussed a little farther on.) In some places the lumbermen went ahead of the farmers and left desolate cut-over lands, which however still retained their interesting herbaceous vegetation, and reproduced the pine again if given half a chance; elsewhere the farmers took possession first, girdled the trees without taking the trouble to cut them down, and left their gaunt skeletons standing in the fields.

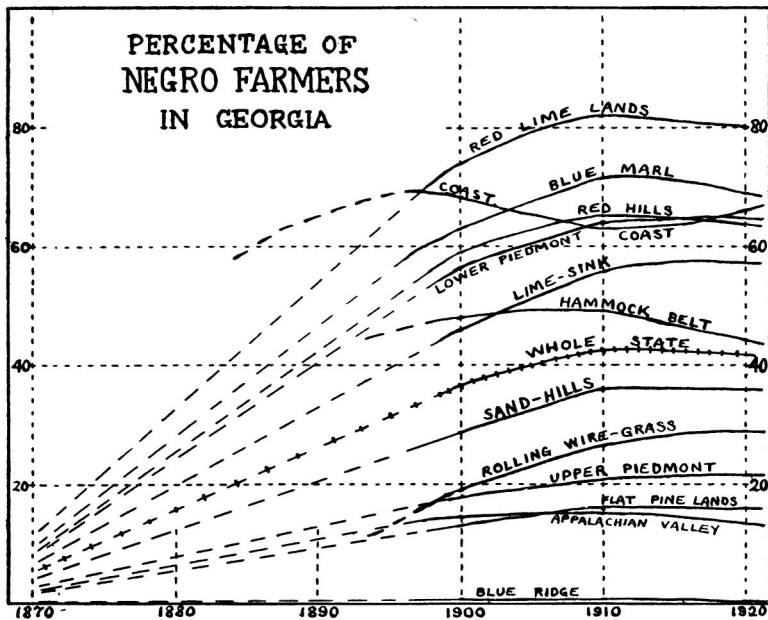
The wire-grass country showed a remarkable increase of about 50% in improved land between 1910 and 1920, in spite of the war and an increase of only 20% in population, and it would seem that the farmers there were trying to make up for a reduced yield per acre by cultivating more acres with more machinery, though the decline of forest industries may also have been a factor. But it is likely that the usual tendency of increasing intensity of farming will be under way again before the next census.

The great increase of farms and population in the sandy parts of the South with the aid of commercial fertilizers since the Civil War is one of the most interesting economic developments of modern times, and it must have had a great deal to do with "putting the South in the saddle" in national affairs a few years ago. (Georgia now has a denser population than Iowa, which has much more fertile soil and about twice as large a proportion of improved land<sup>1</sup>.)

The next graph illustrates the percentage of negro farm operators by regions, at different times. Definite figures are available only for 1900, 1910 and 1920, but it is assumed that there were practically no negro farmers before

1. For a discussion of the extension of agriculture and increase of population in the pine-barrens of the southern coastal plain since 1880 see *Journal of Geography* 15:42-48, Oct. 1916.

the Civil War, and that the proportions increased steadily from the end of the war up to 1900, except in the coast strip, where the statistics seem to indicate that there were a considerable number of negro farmers even in 1870, and in one or two other regions where somewhat similar conditions may have prevailed. The percentage increased in nearly every region between 1900 and 1910, and might have increased a little more by 1920, if it had not been for the World War, which checked the negro population in the South as previously explained.

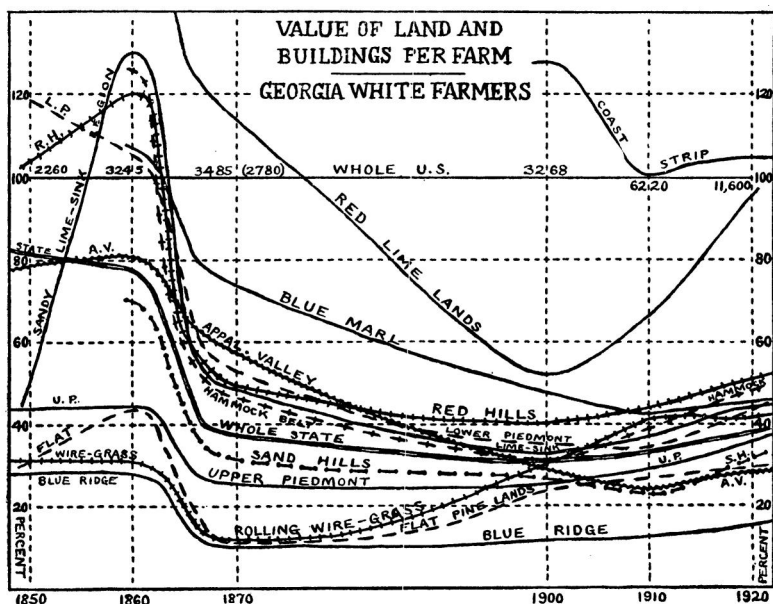


Graph showing percentage of the farms in each region in Georgia, and the whole state, operated by negroes, from 1900 to 1920, with hypothetical extensions of the curves a few decades farther back. (It is assumed that the percentage was zero, or very small, in every region up to 1865.)

Generally speaking, negro farmers are most numerous in the more fertile regions, though their numbers are restricted in the two northernmost regions (and everywhere farther north) by the climate, which is not favorable for cotton growing.



The third graph illustrates the changes in standards of living of the average white farmer in each region since 1850, as indicated by the value of land and buildings per farm, which seems to be the best measure available. On account of the fluctuations of prices, especially in the last two decades, if the values were taken literally the results would be very misleading. So it has been assumed that the standards of the average white farmer in the whole United States have remained constant, and the values for the several regions at each census have been expressed as percentages of the U. S. average. The actual number of dollars involved is written close to the U. S. or 100% line, including both paper and gold values for 1870, when gold was at a premium of about 25%. As a matter of fact there was probably a decline in the average United States stand-



Graph showing value per farm of land and buildings of white farmers in each region from 1850 to 1920, expressed in percentages of the United States white average, to eliminate variations in the purchasing power of the dollar as far as possible. (The numbers along the 100% line are the U. S. white values in dollars.) Certain limitations to the accuracy of the curves are explained in the text.

ards of living between 1860 and 1870, on account of the Civil War, and a smaller one between 1910 and 1920, and an upward trend at other times, so that if we had correct data the curves would be steeper in some places and flatter in others.

As previously explained, practically all farmers were white in 1850 and 1860, and in 1870 the percentage of negro farmers must have been almost negligible except in the coast strip and perhaps one or two other regions. Separate figures for white and colored farmers for areas smaller than states are available only for 1910, but the 1900 and 1920 values have been approximated by assuming that the ratio of white to total farm values in those years was the same as in 1910, except for making a little allowance for known changes in the percentage of negro farmers. It would not be safe to make estimates for 1880 and 1890 in that way, though, for the number of negro farmers in those years is entirely unknown.

The 1850 values are taken from the tables already published, which leave out three of the regions on account of the counties in which they are chiefly situated being too large at that time. The 1860 value for the whole state is also based on the census figures, but those for the several regions have been scaled down about 10%, on account of the number of farms returned by counties being evidently too low, as explained in the March number. Some of the 1870 points have been raised a little to allow for the possible inclusion of a few negro farmers in the returns, but the values for whites in the coast strip at that time must be regarded as wholly indeterminate.

The 1850 and 1860 values for the red lime lands and coast strip are so high that they could not be shown on the graph without making it considerably taller, or using such a small scale that some of the curves toward the bottom would be too close together. The omitted values can be seen in the tables in the June number.

This graph brings out plainly what has already been stated about the regions that have the most negro farmers

generally having the most prosperous whites. The decline in standards of living in every region during the Civil War period is easily understood, but the further decline of several regions between 1870 and 1900 and the rise of most of them (relatively to the whole United States) since 1900 are not so easily explained. Standards of living are not as closely controlled by environment as many people believe, but are more or less spontaneous or accidental. Migration of farmers from one region to another with higher or lower standards might have a marked influence, but the census gives no adequate information about such movements within states. The rapid rise in the red lime lands curve since 1900 may possibly be correlated with the discovery of the cause of malaria in that year.

The white farmers of the coast strip seem to have always been above the United States average, and those of the red lime lands, although apparently below the national average since the 70's, if the calculations are correct, are now more prosperous than the average for any state within 300 miles of the coast from Maine to Texas.

An interesting application of this graph is that most of the noted personages born in Georgia seem to have come from those regions whose rural standards of living were above the state average in ante-bellum days. And comparisons of the same kind between different states show very similar relations.

The census did not give the acreage of different crops until 1880, so that accurate comparisons of crop yields are possible only for about forty years past; but it is safe to assume that the extensive farming of slavery days generally produced even lower yields per acre than in 1880. When we compare two periods only ten years apart we cannot be sure that differences in crop yields are not due to weather conditions or something of the sort; but if we find a progressive rise or decline running through several census periods we are reasonably safe in taking that for a general tendency.

In the state as a whole the average yield of cotton per acre rose from .312 bale in 1879 to .408 in 1909, then dropped as a result of boll-weevil conditions to .356 in 1919. Corn went from 9.2 bushels per acre in 1879 to 12.1 in 1919, oats from 9.04 to 14.7 in the same period, wheat from 6.64 to 7.73, peanuts from 12 bushels in 1889 (when first enumerated) to 18.9 in 1919 (a gain of over 50% in 30 years), sweet potatoes from 72.2 bushels in 1879 to 92.1 in 1919, sugar-cane syrup from 103.8 gallons in 1879 to 170 in 1919, and so on. All these increased yields were doubtless due not only to more careful cultivation but also to the work of the plant breeders in developing more prolific varieties, and more progress in that line may be expected in the future, though of course it cannot go on indefinitely.

Close comparisons of the number of animals per square mile or per farm at different periods are not possible, because the earlier agricultural censuses seem not to have counted calves, colts, lambs, shoats, etc., at all, and that of 1920, having been taken in January, of course found the number of young animals at a minimum. But bearing these limitations in mind, it is pretty evident that the number of cattle and sheep in Georgia, especially the latter, has declined with the passing of the free range. One occasionally sees arguments for the revival of sheep raising, but pasture sheep do not seem to go very well with the intensive farming that seems likely to prevail in Georgia a few decades hence<sup>1</sup>, and the same may be true of beef cattle. Dairy cattle are likely to increase with the growth of cities, unless it is found more profitable to import milk and butter from northern dairying centers and specialize on products better suited to our climate. Work oxen seem to have almost gone out of style, and the last three censuses have not enumerated them. The number of hogs has increased since 1870, but not quite as much as the population. Although more meat is imported into Georgia than was the

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1. England is a great sheep country, but conditions there are exceptional in many respects.

case say fifty years ago, the cattle rangers of the West are giving way to crops too, with the result that the population of the whole United States is becoming more vegetarian in its diet; and we may ultimately approach the condition of China and Japan, where there are hardly any beef animals and not very many hogs but plenty of chickens, which take up very little room and go well with intensive farming.

Horses have declined pretty steadily since 1850 and mules increased correspondingly. In 1850 Georgia had nearly three times as many horses as mules, and in 1920 four times as many mules as horses. Part of this change is due to the passing of the free range, but that does not explain everything, for horses still outnumber mules in the North and West. In the last ten or fifteen years the automobile has displaced many horses, especially in cities (but no more in the South than elsewhere), which had the curious effect of keeping the price of horses nearly stationary through the recent war period, when nearly everything else went up.

Animals of all sorts decreased during the Civil War decade, especially beef cattle and hogs, which were less than half as numerous in Georgia in 1870 as in 1860, having been eaten up during the war and not replaced very promptly. The World War had very little effect of that kind in this country.

It is now pertinent to inquire what the farmers have done for themselves in these seventy years. Boosters can point with pride to the constantly increasing number of farms, cultivated acres, bales of cotton, bushels of corn, value of farm property and products, etc., but much of this progress is more apparent than real, especially in the last particular, values, for the purchasing power of the dollar declined continually from 1897 to 1920, making all prices higher<sup>1</sup>.

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1. A typical example of thoughtless optimism (if that is the proper term for it) is the widely circulated "Blue-Book of Southern Progress," published by the Manufacturers' Record (Baltimore) last spring. It is full of statements about the values of property, products, ect., in the South (including Maryland, West Vir-

In ante-bellum days the average Georgia plantation probably fed and clothed only about one-tenth more people than the number living on it. Cotton and some food-stuffs were sent to market in exchange for what few manufactured articles and delicacies could not be easily produced at home, and the number of merchants, manufacturers, carriers, public officials, etc., probably did not exceed 10% of the adult population. At the present time about half the goods the farmer consumes come from cities or distant states or countries, and there are more people in cities than on farms ) in the whole United States at least<sup>1</sup>), so that the average farmer may be said to be feeding and clothing at least one family besides his own; which is made possible by increased crop yields, improved machinery and transportation facilities, etc., and incidentally smaller families.

In recent decades there have been developed all sorts of schemes and devices, unheard of in ante-bellum times ostensibly for the benefit of the farmers. For example, more prolific varieties of crops, cheaper fertilizers, improved machinery, good roads, telephones, rural free delivery, automobiles, plans for diversification and co-operative marketing, tick eradication, better rural schools, county farm demonstration agents, government bulletins, experiment stations, soil surveys, boys' corn and pig clubs, farmers' organizations, and farm loans. A person who read the agricultural bulletins and papers carefully but never got out among the farmers might think all this would make the modern farmer's life a perpetual picnic, as compared with conditions a generation or two ago.

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ginia, Kentucky, and other border states which are far from typical of the South) in 1920 being more than those of the whole United States in 1880, etc. The figures are taken from reliable sources, but the author carefully avoids mentioning the fact the dollar of 1920 was worth only about half as much as that of 1880 (and one-third that of 1900), which destroys the value of many of his comparisons. If the purchasing power of the dollar should continue to increase in the next several years as it has in the last two (which may not happen), and the same concern should hereafter undertake to show the progress of the South from 1920 to 1930, some other measure than money will have to be used or allowance made for its fluctuations in value.

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1. The census of 1920 found only 29.9% of the population of the United States, and 58.2% of that of Georgia, living on farms.

But (strange to say?) most of our farmers still live from hand to mouth, as they have done ever since the Civil War, and whenever there is a slight crop shortage, or a surplus that brings down prices, or a financial panic, cries of distress are heard on every hand, and "experts" and law-makers get together and try to make the farmers believe that something is going to be done immediately for their relief. Generally speaking, farmers let the benefits of all such agencies as are listed in the preceding paragraph slip through their fingers and pass on to the consumer, and even the consumers have not benefited much as individuals, but have simply become more numerous. While the farmers are undoubtedly more efficient than they used to be, they do not seem to be raising their standards of living much.

The graph a few pages back shows that the average white farmer in Georgia today is poorer than he was in ante-bellum days, and at just about the same level as in the reconstruction period; but most of the regions have been on the up-grade for the last twenty years at least, and some of course have done considerably better than the state average. Separate statistics for negro farmers have not been available long enough yet to show whether they are progressing or not.

In spite of the persistent efforts of many well-meaning but uncomprehending city people to "uplift" the rural population, there seems to be no escape from the fundamental principle that in any state or region *the average farmer*, of any race or nationality, *in the long run* (but not necessarily every farmer every year) *gets out of his farm* or any part thereof *just what he spends on it, plus the value of his time*; regardless of soil, climate, the kind of crops or animals raised, the market price thereof, weeds, insects and other pests, good or bad roads, distance from markets, tenure, taxes, tariffs, the form of government, legislation, loan sys-

tems, or any other factor that does not change much from year to year<sup>1</sup>.

In the above statement of fundamental principles most of the factors are relatively fixed for any one locality, but the value of the farmer's time is somewhat elastic. An intelligent farmer naturally gets a higher return for his labor or supervision than an ignorant one; but when all the farmers become more efficient the benefits are likely to be passed right on to the consumer as above stated. An adequate return for the farmer's time is commonly fixed by the customs and standards prevailing in his community; and if all or nearly all the farmers who produce a given crop could agree that they would not sell it except at a price that would bring them ample remuneration for their efforts they could practically dictate their own terms and raise their standards of living to any reasonable point. Organized laborers have already accomplished much in that line, (at the expense of nearly everybody else), but it would be rather difficult to bring about such unanimity among such a large and heterogeneous class as the farmers. If it could be accomplished though it would do the farmers more good than all the efficiency devices above mentioned, and the consumers would probably be just as well off as they are now, after they became accustomed to the new order of things.

As for the future, about all that can be confidently predicted for the next few decades is that inventions and discoveries tending to increase the efficiency of farming will continue to be made, thus enabling the farmers to support more and more city people; and as the population increases

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1. It is assumed that most farmers in a given region are so nearly adjusted to their environment that they do not waste time trying to raise crops wholly unsuited to the locality, or in other unprofitable efforts. But even if a farmer was completely adjusted, the environment is liable to change at any time, by the arrival of a new kind of bug, a change in the tax rate or assessment, the building of a new road or railroad, or something of the kind, so that the future is always a little uncertain. And another important point is that farmers differing widely in efficiency and standards of living may dwell in the same community at the same time, just as trees, shrubs and herbs of many species may grow side by side in the same soil. In every community there are some far above the average, who are always prosperous, and many below the average, but the average itself is not easily changed.



land will become more valuable and farming more intensive, though not an equal rate everywhere<sup>1</sup>.

It is also likely that the farms and cities will continue to encroach on the forests, the number of tenants will increase, and the number of horses, beef cattle, sheep and perhaps hogs per capita will decline.

If there is anything in evolution the farmers in Georgia and elsewhere ought to gradually better their condition, as long as wars and other calamities do not interfere, but this process will hardly keep pace with the increase of population and total wealth, in spite of any efforts that may be made to "speed it up."

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1. At the present time about one-tenth of the inhabitants of the United States (including a good many in Georgia) are living in counties whose population has been practically at a standstill for 25 years or more; and most such counties are characterized by rather high rural standards of living, so that the inhabitants thereof ought not to worry about their failure to increase.